The Chesapeake Bay Multispecies Monitoring and Assessment Program (ChesMMAP)

Data Source

Virginia Institute of Marine Science (VIMS)

Data Type

Trawl: catch and environmental data

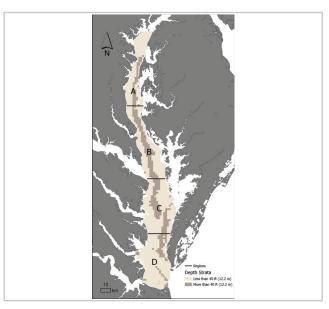
Date Range 2002-Present Data Resolution

NA

Data available online?
Yes□ No□

Geographic Range

Chesapeake Bay, USA



Methodology

The survey uses a large-mesh bottom trawl to sample juvenile-to-adult fishes from the head of Chesapeake bay at Poole's Island, MD to the mouth of the Bay just outside the Chesapeake Bay Bridge Tunnel. The Chesapeake Bay has been broken down into 5 regions of approximately 30 latitudinal minutes each. Within these 5 regions 80 samples sites are chosen for each cruise using a stratified random design.

Overview

The Chesapeake Bay Multispecies Monitoring and Assessment Program, ChesMMAP, began in 2002 and was developed to assist in filling data gaps, and ultimately to support Bay-specific, stock-assessment modeling activities at both single and multispecies scales. ChesMMAP was designed to maximize the biological and ecological information collected for several recreationally, commercially, and ecologically important species in Chesapeake Bay.

ChesMMAP is fishery-independent monitoring survey that uses a large-mesh bottom trawl to sample late juvenile-to-adult fishes in the mainstem of Chesapeake Bay. This program currently provides data on relative abundance, length, weight, sex ratio, maturity, age, and trophic interactions for several important fish species that inhabit the bay seasonally.

The ChesMMAP Survey has several goals:

- To estimate population sizes for priority species
- To quantify geographic and seasonal distribution of these species
- To quantify major links in the Bay's food web by conducting stomach content analysis for all species sampled
- To define the seasonal length and age structure of the fish and elasmobranch populations by taking otolith or vertebrae samples from the individuals collected.

Data Caveats

Relatively short time series means incorporation of abundance data into stock assessment has only been possible for two species: sculp and weakfish. Time series length, not data quality is the issue.

Data Access

ChesMMAP website with links to data viewer, reports, data uses and other useful information:

https://www.vims.edu/research/departments/fisheries/programs/multispecies_fisheries_research/chesmmap/index.php Data 2002-2013 available for download here:

https://catalog.data.gov/dataset/the-chesapeake-bay-multispecies-monitoring-and-assessment-program-chesmmap Contact Person: Jim Gartland, (804) 684-7546, jgartlan@vims.edu